

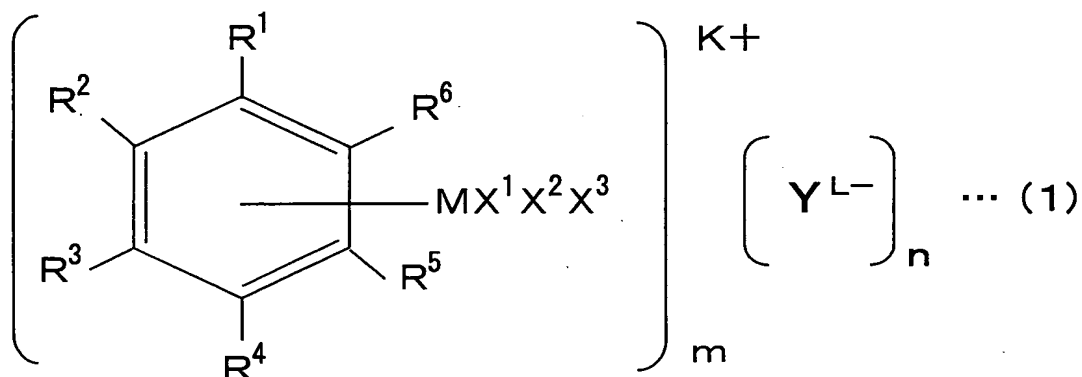
[TITLE OF THE DOCUMENT] ABSTRACT

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[OBJECT] An object of the present invention is to realize a reducing process of carbon dioxide in which carbon dioxide is directly reduced not in an organic solvent but in water under mild conditions.

[MEANS TO ACHIEVE THE OBJECT]

Carbon dioxide and water are mixed with an organometallic complex represented by general formula (1) below



where R¹, R², R³, R⁴, R⁵, and R⁶ independently represent a hydrogen atom or a lower alkyl group, M represents an element that can be coordinated to the benzene ring, X¹ and X² represent nitrogen-containing ligands, X³ represents a hydrogen atom, a carboxylic acid residue, or H₂O, X¹ and X² may be bonded to each other, Y represents an anion species, K represents a valency of a cation species, L represents a valency of an anion species, K and L independently represent 1 or 2, and K, m, L, and n are related to one another by K x m = L x n. This makes it possible to directly reduce carbon dioxide in water.

[SELECTED DRAWINGS]

No Drawing